Research Opportunity for MEng Projects at Intelligent Medical Image Computing Systems (IMICS) Lab

Research Area: Machine Learning, Operations Research, Appointment Scheduling

Supervisor: Prof. Farzad Khalvati

Contact: farzad.khalvati@utoronto.ca

At Intelligent Medical Image Computing Systems Lab (IMICS Lab) at The Hospital for Sick Children, we investigate and develop Artificial Intelligence (AI) algorithms for optimizing patient appointment scheduling for the Department of Diagnostic Imaging (DI). In DI, approximately 3000 appointments are scheduled monthly. DI is an important step in disease diagnosis and hence, timely access to its appointments is crucial for optimal care delivery to patients. We develop AI-based predictive tools to improve equitable access to DI appointments for all patients, regardless of ethnicity, race, gender, age, or socioeconomic status.

The technical background required for this project are Machine (Deep) Learning, Scheduling, and Optimization.

By joining our team, you will have the opportunity to work closely with radiologists and clinicians at SickKids Hospital and have access to world class medical data and high-performance computing facility. You will also work with a team of graduate and undergraduate students who investigate different aspects of AI in medicine.

Based at SickKids Hospital, IMICS Lab is affiliated with Department of Medical Imaging, Institute of Medical Science, Department of Mechanical and Industrial Engineering, and Department of Computer Science at the University of Toronto.

IMICS Lab: www.imics.ca